

Small Signal Feed Through Filters AKCL 100 series

CL configuration, ceramic dielectric

Feed through filter range using discoidal ceramics for the capacitive element - type 2R1. This robust multilayer structure provides solutions to RFI problems from 30kHz to 1 GHz. The units are housed in robust, sealed metal containers of thread construction, and offer a range of terminal finishes. Specifically designed for military, industrial, telecoms and medical applications.

- Capacitive value – 1.2uF 80Vdc rated
- Wide choice of performance options
- Excellent temperature stability
- Hermetic construction



Mechanical Specifications

Manufacture: sealed threaded construction.

Connections: wire or tag terminations.

Mounting: thread 1/4 inch-28 UNF 2A.

Case Variants

Style	Seal	L1	L2	L3	L4 (std)			L4 (long thread)			D2
		max	max	max	PIN	TAG	PIN	TAG	PIN	TAG	
1	resin	4.6	4.85	8.25	17	8.9	17.2				1
2	resin	4.6	7.95	8.25	17	-	-	12	29.3	1	
3	hermetic	4.6	4.85	8.5	17	8.9	17.2	-	-	1.5	
4	hermetic	4.6	7.95	8.5	17	-	-	12	29.3	1.5	
5	hermetic	14.7	4.85	18.8	27	8.9	17.2	-	-	1.5	
6	hermetic	14.7	7.95	18.8	27	-	-	12	29.3	1.5	

Filter Range - AKCL

(example pt no. - AKCL100412RKT1S)

Code	Max values		Typical insertion loss (dB)						CCT
	I _r dc •(A)	R _{dc} (Ω)	30 kHz	150 kHz	300 kHz	1 MHz	10 MHz	1 GHz	
100 412RK-1-	15	0.008	15	28	34	44	60	70	1
100 412RK-3-	15	0.008	15	28	34	44	60	70	1
100 412RA-5-	0.06	70	44	70	70	70	70	70	1
101 412RA-5-	0.06	70	44	70	70	70	70	70	2
100 412RB-5-	0.15	12	24	52	64	70	70	70	1
101 412RB-5-	0.15	12	24	52	64	70	70	70	2
100 412RC-5-	0.25	4	18	42	56	70	70	70	1
101 412RC-5-	0.25	5	18	42	56	70	70	70	2
100 412RD-5-	0.30	2.3	16	35	44	62	70	70	1
101 412RD-5-	0.30	2.3	16	35	44	62	70	70	2
100 412RE-5-	0.45	1.2	15	31	37	55	70	70	1
101 412RE-5-	0.45	1.2	15	31	37	55	70	70	2
100 412RJ-5-	10	0.01	15	28	33	44	64	70	1
101 412RJ-5-	10	0.01	15	28	33	44	64	70	2

Case finish: T = Tin plated
S = Silver plated
G = Gold plated
Case style available: 2 instead of 1; 4 instead of 3; 6 instead of 5
Termination: W = Wire
T = Tag
P = Headed wire

• I_c.dc (category current) equals 0.6 I_r
(rated current) with linear derating from
105°C to +125°C

Electrical Specifications

Rated voltage (V_R): 80Vdc

Category voltage (V_C): 50Vdc

Rated current (I_r): referred to room temperature = 40°C

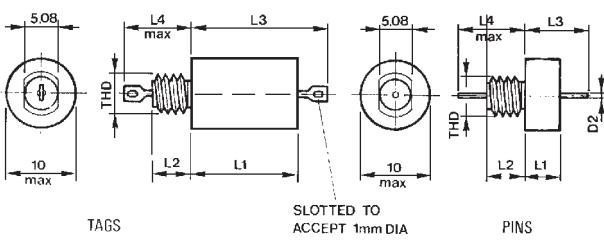
Voltage test (2_s): 2.5 V_R dc

Climatic category: (55/125/56;)

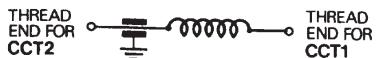
Temperature range: -55°C to +125°C

Capacitance value: 1.2uF

Dimensions (mm) and connections



Circuit diagram (CL configuration)



OTHER PRODUCT RANGES AVAILABLE:

Ceramic feed through filters (CL, Pi, 1T, CC, 2P, 2T configurations)

AK 100-101 series in accordance with BS9121 F0009

AK 170-171 series in accordance with BS9121 F0011

Please, contact Arcotronics UK for more detailed information.

Approvals

BS 9121 F0008 meets MIL-F-15733 requirements